

Bachelor of Science in Computer Science

Software Engineering Cognate

2024-2025 Degree Completion Plan

Important: This degree plan is effective for those starting this degree program in fall 2024 through summer 2025. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations or cognates.

GENERAL EDUCATION/

	ONAL SKILLS REQUIREMENTS (42-4								
Course		<u>Hrs</u>	Sem	Grade	Course		Hrs	Sem	Grad
Communicat	tion & Information Literacy (12 hours) ¹				Major Found	ational Courses (0-20 hours)			
ENGL 101	Composition & Rhetoric	3			BUSI 240	Organizational Behavior & Management ⁴	3		
	Communications Elective	3			CSCN 110	Introduction to Computer Sciences ⁴	3		
	Information Literacy Elective	3			CSCN 111	Programming in C++ Beginner ⁴	3		
	Information Literacy Elective	3			ENGR 270	Technical Communication ⁴	3		
					MATH 131	Calculus & Analytical Geometry I ⁴	4		
Technological Solutions & Quantitative Reasoning (5-8 hours) ¹				PHYS 201	General Physics I ⁴	4			
UNIV 101	Foundational Skills	1							
MATH	Math Elective (MATH 114 or higher)	4		· 	MAJOR				
	Technology Competency ²	0-3			1,1110 0 11	Core (42 hours)			
	1 1 1				CSCN 112	Programming in C++ Advanced ⁵	3		
Critical Thinking (5 hours) ¹					CSCN 215	Data Structures & Algorithms Using C++ ⁵	3		-
RLGN 105	Intr Bwww/Contemp Moral Issues ³	2			CSCN 230	Business Data Communications & Networks	-		
	Critical Thinking Elective	3			CSCN 326	Database Design & Management ⁵	3		
	Citical Timiking Elective	3			CSCN 340	Information Security Concepts & Principles ⁵	3		
	pal Engagement (5 hours) ¹				CSCN 342	Computer Architecture ⁵	3		
EVAN 101	Evangelism & Christian Life ³	2			CSCN 345	Linux Operating Systems ⁵	3		-
	Cultural Studies Elective	3			CSCN 352	Windows System Administration ⁵	3		
	Cultural Studies Liceuve	3			CSCN 355	Network Architecture, Protocols, & Theory ⁵	3		-
Social & Said	entific Inquiry (7 hours) ¹				CSCN 434	Program Language Design & Comp Theory ⁵	3		
Social & Scie	Natural Science Elective	4			CSCN 443	Operating Systems Design & Comp Theory	3		
	Social Science Elective	3			CSCN 471	Software Engineering Management ⁵	3		
	Social Science Elective	3			CSCN 481	Computer Science Practicum I ⁵	3		
OI	9 C 4 4 (9 L)1				CSCN 481 CSCN 482	Computer Science Practicum I Computer Science Practicum II ⁵	3		-
	& Contexts (8 hours) ¹	2			CSCN 482	Computer Science Practicum II	3		
BIBL 105	Old Testament Survey	2 2				C(121)			
BIBL 110	New Testament Survey				D1101 407	Cognate (12 hours)	2		
THEO 201	Theology Survey I ³	2			BUSI 427	Team Dynamics ⁵	3		
THEO 202	Theology Survey II ³	2			CSCN 310	Web Programming in HTML ⁵	3		
					CSCN 315	Front-end Programming in JavaScript ⁵	3		
					CSCN 375	Human-Computer Interaction ⁵	3		
						Quantitative Studies Courses (13 hours)			
					MATH 128	Precalculus with Trigonometry ⁶	4		
					MATH 211	Introduction to Statistical Analysis	3		
					MATH 250	Introduction to Discrete Mathematics	3		-
					MATH 250 MATH 350	Discrete Mathematics	3		-
					WIA111 330	Discrete Mathematics	J		-
						<u>Lab Sciences Courses</u> (4 hours)			
						Lab Science Elective ⁷	4		-
						Technical Elective Courses (7 hours) ⁸			
						reclinical Elective Courses (7 hours)			
Notes							_		

Notes

All applicable prerequisites must be met

¹Refer to the list of approved general education electives at www.liberty.edu/gened before enrolling in foundational skills requirements

²All students must pass the Computer Assessment OR complete applicable INFT course; refer to www.liberty.edu/computerassessment for more information

³Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 & EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 & THEO 202 waived

Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at www.liberty.edu/gened

⁵Students are required to take these courses residentially in support of ABET accreditation Exceptions may be made on a case by case basis, and require ABET coordinator review and Department Chair approval.

⁶Any student entering the major directly into MATH 131 will require a 4 credit MATH Elective to substitute in place of MATH 128 (for example, MATH 132 may sub for credit) ⁷Choose any science course which includes a lab component. If choosing a Physics course, it must be PHYS 202 and 202L, or a higher level Physics course. PHYS 101 and 103 are not allowable.

⁸Choose from: BUSI 300, 301, 313, 424, 427, any 200-400 level Computer Science course, any 200-400 level Engineering course (except ENGR 210), or any Advanced Math course (must be MATH 132 or higher) not already required by the degree.

Suggested Course Sequence on second page

Graduation Requirements

120 Total Hours

2.0 Overall grade point average

30 Hours must be upper-level courses (300-400 level)

Grade of 'C' Minimum required for <u>all</u> courses in the major, quantitative studies, lab science, technical elective, and major foundational sections

25% Of major, core, and cognate taken through Liberty University

30 Hours must be completed through Liberty University

Grad App Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

CSER All requirements must be satisfied before a degree will be awarded

Revised: 04.26.2024 Effective: Catalog Term 2024-40

SUGGESTED COURSE SEQUENCE

FRESHMAN YEAR

First Semester		Second Semester								
ENGL 101	_ 3	BIBL 105 2								
EVAN 101	2	UNIV 101 1								
RLGN 105	2	Information Literacy Elective ¹ [CSCN 111] 3								
Information Literacy Elective ¹ [CSCN 110]	3	Math Elective ¹ [MATH 131] 4								
Technology Competency ²	0-3	CSCN 230 3								
MATH 128 ³		Communications Elective ¹ [ENGR 270] 3								
CSER	0	CSER <u>0</u>								
Total	14-1′	Total 16								
SO	PHON	IORE YEAR								
BIBL 110	2	Social Science Elective ¹ [BUSI 240] 3								
THEO 201	2	CSCN 215 3								
CSCN 112	3	CSCN 352 3								
CSCN 345	3	CSCN 355 3								
MATH 250	3	MATH 350 3								
CSER	0	CSER 0								
Total	al 13	Total 15								
JUNIOR YEAR										
Natural Science Elective ¹ [PHYS 201]	4	BUSI 427 3								
CSCN 340	3	CSCN 310 3								
CSCN 342	3	CSCN 326 3								
CSCN 375	3	CSCN 471 3								
MATH 211	3	Lab Science Elective ⁴ 4								
CSER	<u>0</u>	CSER $\underline{0}$								
Tota	al 16	Total 16								
SENIOR YEAR										
CSCN 315	3	THEO 202 2								
CSCN 434	3	Critical Thinking Elective ¹ 3								
CSCN 443	3	Cultural Studies Elective ¹ 3								
CSCN 481	3	CSCN 482 3								
Technical Elective ⁵	4	Technical Elective ⁵ 3								
CSER	0	CSER $\underline{0}$								
Total	al 16	Total 14								

Notes

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³Any student entering the major directly into MATH 131 will require a 4 credit MATH Elective to substitute in place of MATH 128 (for example, MATH 132 may sub for credit)

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5Choose from: BUSI 300, 301, 313, 424, 427, any 200-400 level Computer Science course, any 200-400 level Engineering course (except

ENGR 210), or any Advanced Math course (must be MATH 132 or higher) not already required by the degree.